

ABSTRACT

A method of plasma doping in which dilution of B_2H_6 is maximized for enhanced safety and stable plasma generation and sustention can be carried out without lowering of doping efficiency and in which the amount of dopant injected can be easily controlled. In particular, a method of plasma doping characterized in that B_2H_6 gas is used as a material containing doping impurity while He is used as a substance of high dissociation energy and that the concentration of B_2H_6 in mixed gas is less than 0.05%.